



Welcome to the Science Learning Partnership newsletter. The focus of the SLP is to support schools and individuals to develop their teaching of science in primary and secondary schools, and FE colleges across Lincolnshire.

All our programmes and projects are designed to have a positive impact on participants to ensure that we have a high impact on the STEM education of young people. To impact positively on young people we work with teachers and support staff working in STEM education across Lincolnshire to help improve subject knowledge, pedagogy and leadership.

LATEST NEWS...

LEARN CHEMISTRY SITE

PRIMARY RESOURCES

The Royal Society of Chemistry recognises the value of primary science in developing a person's chemical understanding. Through the teaching of fundamental concepts, such as changing of state and properties of materials you are laying the foundations of chemistry.

This collection of resources supports your subject knowledge and teaching of primary chemistry, including the linking of science with cross-curricula topics, with resources that detail investigations to run with your class.

www.rsc.org

NATURE GRANTS LEARNING THROUGH LANDSCAPES

The Local Schools Nature Grants Scheme allows Infant, Primary and Secondary schools in England, Scotland & Wales to apply for £500 worth of outdoor resources, and a two hour training session thanks to Postcode Local Trust, which receives funding from players of People's Postcode Lottery.

Closing date 30th November 2018 www.ltl.org.uk/index.php



SUBJECT LEADERS' DEVELOPMENT MEETING

7th November 2018 at The Keyworth Centre, Skellingthorpe Road, Lincoln LN6 0EP, 9am-3.30pm

Aimed at Curriculum Leaders or other Leaders (SLE, Lead Practitioner, second in charge of science), it is open to all institutions and relevant to those delivering secondary level qualifications.

Agenda to include: • Exam Debrief • EEF report
• Teaching low prior attaining students
• Developing your team through coaching

Alliance Members £60, Non-Alliance members £100

To book www.lincolnshiresa.co.uk/slp

EARLY YEARS PROGRAMME

Kit & Pup is a preschool show for little scientists.

It explores concepts such as floating & sinking, squashy & stretchy and heavy & light.

www.bbc.co.uk/programmes/b0bb6kn8/episodes/player



WORKING SCIENTIFICALLY

The Centre of Industry Education Collaboration CIEC have produced a document Working Scientifically in the Primary Classroom: Progression of Enquiry Skills from EYFS to KS3.

This can be viewed using the following link:
www.ciec.org.uk/pdfs/primary/working-scientifically.pdf

SPACE EDUCATION QUALITY MARK

www.stem.org.uk

The Space Education Quality Mark (SEQM) is designed to support schools and colleges who want to inspire and engage their students in science, technology, engineering and mathematics (STEM) subjects.

The mark is free for primary and secondary schools and colleges.

"I always get a much needed boost to science when I attend these sessions – thank you."

"Lots of ideas to make science teaching more relevant to everyday life and more enjoyable."

"Fantastic introduction to wide variety of resources – many of which I will use."

NEW CREST AWARDS RESOURCES

CREST is a scheme that inspires young people to think and behave like scientists and engineers. CREST helps young people become independent and reflective learners through enquiry-based project work.

CREST Awards are flexible and cost effective. They can be run in schools, clubs or at home. With no set timetable, projects can start whenever you want, and take as long as you need. There are six CREST Award levels. To choose the right one, consider the age and ability of your students and the time they have available to do the Award.

www.crestawards.org



BP CHALLENGE

Reimagine a solution to a real-life problem

This year the BP Ultimate STEM Challenge is asking UK students aged 11 to 14 to put their science, technology, engineering and maths skills to the test and reimagine a solution to a real-life problem. More information is available on the website.

www.bpes.bp.com

FARMVENTION SITE AND COMPETITION

Farmvention (when farming meets invention) is a national STEM competition run by the NFU aimed at primary school children. There are three exciting problem-based challenges that can be entered by individual children or in teams. Each challenge is supported by curriculum linked resources created in partnership with the Association for Science Education (ASE). www.farmvention.com

WHIZZ POP BANG

Whizz Pop Bang is an award-winning science magazine that brings science to life for girls and boys aged six to twelve (and their parents too)!



The magazine is packed full of hands-on experiments, puzzles and awesome science news; sparking imaginations and inspiring the scientists of the future. www.whizzpopbang.com

BRITISH SCIENCE WEEK 2019

8th-17th March 2019

Look out for the Primary course being organised for Spring Term 2019 to support you in making your science week a wow!

www.britishtscienceweek.org

Applications for British Science Week 2019 are now open. Closing date 5pm on 12th Nov 2018

KICK START GRANTS

This scheme offers grants for schools in challenging circumstances to organise their own events as part of British Science Week. There are three options available:

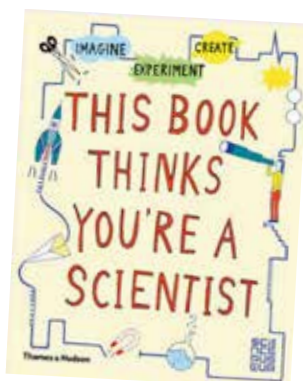
- **Kick Start grant:** A grant of £300 for your school to run an activity
- **Kick Start More grant:** A grant of £700 for your school to host a science event or activity which involves your students and the local community
- **Kick Start Youth grant:** A grant of £150 for your school to run an activity during British Science Week organised by students.

The theme for the 2019 activity packs is *Journeys* and they will be available to download in early November

SCIENCE BOOKS FOR CHILDREN

This Book Thinks You're A Scientist: Imagine, Experiment, Create
by Harriet Russell

This book explores seven key scientific areas in the Science Museum's new interactive gallery for children: force and motion, electricity and magnetism, earth and space, light, matter, sound and mathematics. Each spread centres on an open-ended question or activity, with space on the page for the child to write, draw or interact with the book. Imagine dogs are magnetic! Design how you would make a book fly. Write a new robot language. The book ends with a section for children to record their own guided independent investigations, including surveys and experiment logs.



The Icky Sticky Science Activity book (science museum activity book)
by Deborah Patterson & Graham Smith

The Icky Stick Science Activity Book has a mix of doodles, games, quizzes and puzzles.



Science Fiction, Science Fact! Learning Stories through much loved stories
by Jules Pottle

This is a book for story-loving primary teachers who want to find a creative way to teach science. Contextualising science in a story that pupils know and love, the book contains a wide range of activities and investigations to help Key Stage 2 pupils engage in science learning, while also extending aspects of the English national curriculum.



FORTHCOMING COURSES...

"Lots of useful ideas as always – thank you"

PRIMARY SCIENCE SUBJECT LEADERS' MEETINGS

"Lots of links, grants and resources given/ post marked"

PRESENTER: JANE BANHAM TIMES: 1PM-4PM

LINCOLN Manor Farm Academy, LN6 9ST	Wednesday 6th Feb 2019	Monday 20th May 2019	
BOSTON Staniland Academy, PE21 8DF	Tuesday 5th Feb 2019	Tuesday 21st May 2019	
SKEGNESS Beacon Primary Academy, PE25 2RN	Monday 11th Feb 2019	Wednesday 22nd May 2019	
GAINSBOROUGH Castle Wood Academy, DN21 1EH	Tuesday 30th Oct 2018	Tuesday 12th Feb 2019	Tuesday 4th June 2019
STAMFORD Malcolm Sargent Primary School, PE9 2SR	Wednesday 31st Oct 2018	Monday 4th Feb 2019	Thursday 9th May 2019

PRIMARY CPD COURSES

Developing the Role of the Science Subject Leader

COURSE INFO		OUTCOMES
Good subject leadership has a positive impact on the quality of science teaching in primary schools. You will explore a range of strategies to audit and lead science in your school, understand your role more fully and be able to identify and promote effective primary science.		<ul style="list-style-type: none"> Set and manage processes for leading science effectively Lead change in your school to support delivery of the new primary curriculum
Monday 12th November	9.30am-3.15pm	Staniland Academy, Boston PE21 8DF
Monday 19th November	9.30am-3.30pm	Manor Farm Academy, Lincoln LN6 9ST

Teaching Science in EYFS

COURSE INFO	OUTCOMES	
Science can be used to support the development of the three characteristics of effective learning through exploration of the immediate environment. This course will increase your confidence in using a range of approaches and assessment strategies to meet children's needs in Early Years.	<ul style="list-style-type: none"> Identify and plan opportunities for the development of the three characteristics of effective learning Have an extended range of strategies to engage children with their immediate environment Have increased confidence in using a range of assessment approaches 	
Wednesday 28th November	9.30am-3.30pm	Manor Farm Academy, Lincoln LN6 9ST

Making powerful connections between primary literacy and science

COURSE INFO	OUTCOMES	
You will explore a range of strategies designed to improve children's ability to use scientific language. You will be able to maximise the opportunities for developing literacy skills and improving attainment in science by planning lessons in which children communicate science ideas, knowledge and understanding.	<ul style="list-style-type: none"> Gain an awareness of the nature and breadth of opportunities for linking science and literacy Develop strategies for raising attainment in science through developing speaking, listening and writing skills to communicate scientific learning Begin to identify progression in science and literacy 	
Monday 3rd December	9.30am-3.30pm	Malcolm Sargent Primary School, Stamford PE9 2SR



£99
per session

SECONDARY

Engaging & Ensuring progress of low attainers in science

COURSE INFO

This course provides strategies to help you improve the progress made by low attaining students in science. It looks at how you can plan for increased engagement and addresses the development of numeracy and literacy skills in science and the identification of science misconceptions. The course also addresses the challenges of the new GCSE courses.

OUTCOMES

- identify actions aimed at improving student motivation and increase engagement
- identify ways to improve the confidence of students
- consider how best to prepare students for the demands of the new GCSEs practical questions
- identify new and interesting challenges to incorporate into science practical teaching
- consider how to support students with the unique literacy challenges linked to science achievement
- begin to develop a five year numeracy road map to support improved attainment in numeracy

Wednesday 5th December 2018 9.30am-3.30pm Haven High Academy, Boston PE21 9HB

Getting students to the top grades

COURSE INFO

The 2018 exams for the new specification presented a number of new challenges that teachers will want to respond to in their teaching so that their students are fully prepared going forward. Increased challenge, significant changes of emphasis in the Assessment Objectives, increased Maths, and significant change to the focus and method of assessment of working scientifically all require adjustments in teaching. Delegates will analyse what top grade students are going to be expected to do and consider what learning experiences they will need to build into their teaching to fully prepare their students. This course will give you the opportunity to explore solutions to these challenges and go away with actions to implement into your teaching to enhance provision.

OUTCOMES

- Reflect on the challenges of teaching the new GCSE Specifications, especially in the regard of teaching the high prior attaining students
- Consider how best to develop the skills students will need in order to perform at the higher grades.
- Plan actions to enhance the delivery of the new course to ensure good student progress
- Consider how to evaluate student progress and current performance.

Thursday 31st January 2019 9.30am-3.30pm Boston Grammar School PE21 6JY

Monday 11th March 2019 9.30am-3.30pm The Keyworth Centre, Lincoln LN6 0EP

PHYSICS SUBJECT SPECIALISM TRAINING

If any of the following apply to you then you may be eligible to enrol on this DfE funded Subject Specialism Training:

- Teachers of other subjects wanting to teach physics
- Returning teachers wanting to refresh their subject knowledge
- Teachers preparing to deliver Core Physics qualifications
- Teachers lacking confidence to teach Higher GCSE

The aim of the programme is to support staff to upskill their physics subject knowledge to Higher GCSE and level 3 standard appropriate for Core Physics qualifications.

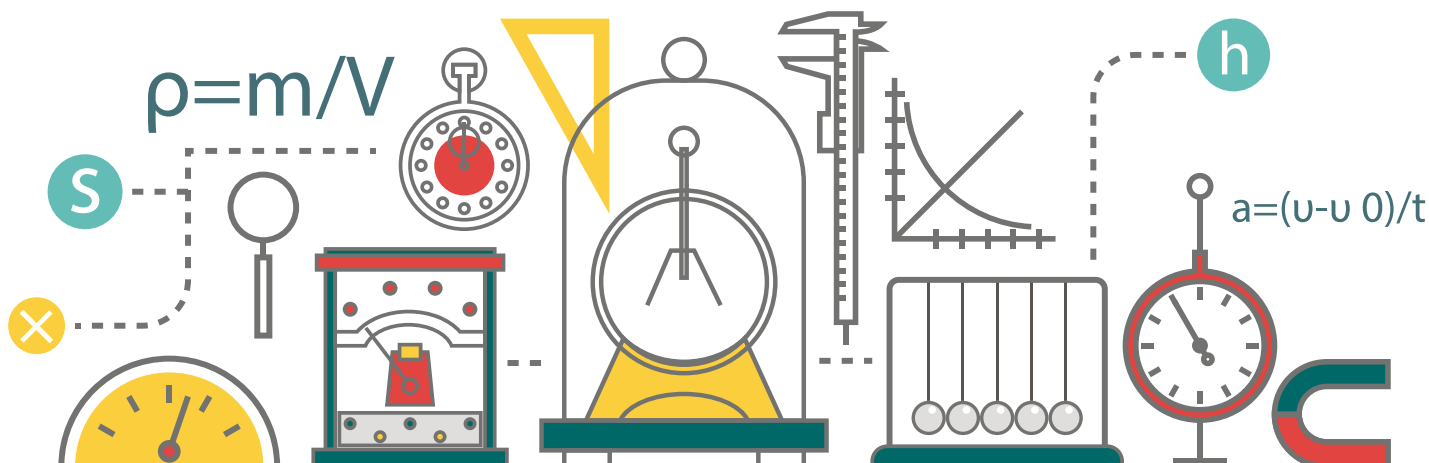
The format of the programme will be 6 twilights over the course of the year where tutors will support participants with content and pedagogy. In between the sessions participants will have the support of a tutor to deepen their understanding of the ideas. Participants will have the opportunity to achieve the Subject Knowledge Accreditation offered by The University of Plymouth.

2018: Wednesday 7th November
Thursday 6th December

2019: Tuesday 22nd January
Wednesday 27th February,
Wednesday 20th March
Tuesday 30th April

All sessions are at The Priory City of Lincoln Academy,
Skellingthorpe Road, Lincoln LN6 0EP, 2pm-5pm

FREE PHYSICS WORKSHOP



at PRIORY ACADEMY LSST, LN5 8PW 2pm-5pm

The workshops will concentrate on practical activities to help the teaching of Physics in Years 7-11.

They will be particularly useful for science teachers particularly non-physicists and/or new teachers delivering Physics across all year groups, or technicians who support this practical work.

IOP Institute of Physics

FORCES

Tuesday 20th November 2018

RADIOACTIVITY

Tuesday 15th January 2019

ELECTROMAGNETISM & WAVES

Tuesday 12th February 2019

For more information please contact:

01522 889297 • science@lincstsa.co.uk

www.lincolnshiretsa.co.uk/slp



@lincstsa

Working together to support schools in delivering outstanding outcomes for the young people of Lincolnshire